

Date: Thursday, 19/03/2009 4:31:05 PM  
User: Julie Dawson

Process Sheet

393.7

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: ARM
Job Number	: 46619		
Estimate Number	: 12883		
P.O. Number	:	Part Number	: D3560043
This Issue	: 19/03/2009 S.O. No. :	Drawing Number	: D3560 REV D
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : MACHINED PARTS	Drawing Revision	: D
Previous Run	: 44473	Material	:
Written By	:	Due Date	: 03/04/2009
Checked & Approved By	: <u>JUD 09.03.19</u>	Qty:	<u>4</u> Um: Each
Comment	Est Rev:A New Issue 07.05.24 EC Est Rev B ECN 987 07.10.09 EC Est Rev:C ECN1048 07-12-18 DD verified by: EC		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M6061T6B0500X05000	6061-T6 Bar .500 x 5.00
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Comment: Qty.: 1.3598 f(s)/Unit Total: 10.8780 f(s)  
 6061-T6 Bar 0.50" x 5.00"  
 Batch: M111321

6061-T6 .500 x 6.00

SA 09/05/01

2.0	BAND SAW	BAND SAW
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Comment: BAND SAW  
 Cut blanks 15.500" long

SA 09/05/01

3.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1

1- Mill as per Folio FA695 Rev: B & Dwg D3560 Rev: D

2-C'sink 0.196" hole on manual mill as per dwg D3560

3-Deburr per dwg D3560

DTO →  
 09/04/04  
 88 09/04/04

4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

09/04/04 / 88 09/04/04

# Dart Aerospace Ltd

W/O: <u>  </u>		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3560-043 PAR #:            Fault Category:            NCR: Yes ☒ No ☐ DQA: D Date: 09/04/29  
 Resolution:            Disposition:            QA: N/C Closed:            Date:           

NCR: <u>46619</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/04/04	50	Dimension of Pocket is too thick. .138" +.010" was .208". R.C. Bad origin operator In training	<i>[Signature]</i> 09/04/04	Acceptable! No Replace. only the upper pockets. Better thicker than this <del>1 part only</del> . All 4 parts.	<i>[Signature]</i> 09/04/04 <del>09/04/04</del>	S 09/04/30	<i>[Signature]</i> 09/04/30	<i>[Signature]</i> 09/04/30
09.04.07	3	Ø0.507 PIVOT HOLE IS Ø0.508 ON Qty (3). Ø0.507 BUSHING HOLE IS Ø0.505	<i>[Signature]</i> 09.04.07 per Q51 042	Acceptable update CNC prog to add additional pass to reduce tool deflection	<i>[Signature]</i> 09.04.07	S 09/04/30	<i>[Signature]</i> 09.04.07 per Q51 042	<i>[Signature]</i> 09/04/30

NOTE: Date & initial all entries

Date: Thursday, 19/03/2009 4:31:05 PM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ARM

Job Number: 46619

Part Number: D3560043

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

JL 09/04/05

6.0

D35921

Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

PLATE 344666-2 B41015-2

09.04.29 4

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld assembly as per dwg D3560

STEP:

- 1- clean material (buff bracket and bottom of arm with blue pad) H
- 2- set up bracket and arm on jig H
- 3- preheat bracket and arm with torch H
- 4- clean before welding with brush H
- 5- set up machine to 135 amps H
- 6- weld across bottom and top ends H
- 7- reheat with torch ( 65 deg C ) H
- 8- on one side weld from bottom to top half way H
- 9- same for other side (half way) H
- 10- from half way point weld the rest of the first side (ease off pedal near end) H
- 11- same for remaining side (ease off pedal near end) H

09.04.29 4

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Soldered @

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

PD 09-04-30 (4)

10.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

BR 09-04-30 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 19/03/2009 4:31:05 PM  
User: Julie Dawson

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: ARM

Job Number: 46619

Part Number: D3560043

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FS 09/04/30 (4)

12.0

D2808

Bushing



Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s)

Spacer

batch:

B41708

FS 09/04/30

13.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Press bushing in D3560 arm per dwg D3562

FS 09/04/30 (4)

14.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

FS 09/04/30 (4)

15.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

PATE

FS 09/04/30 (4)

16.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/05/01

Job Completion



MF 09-04-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

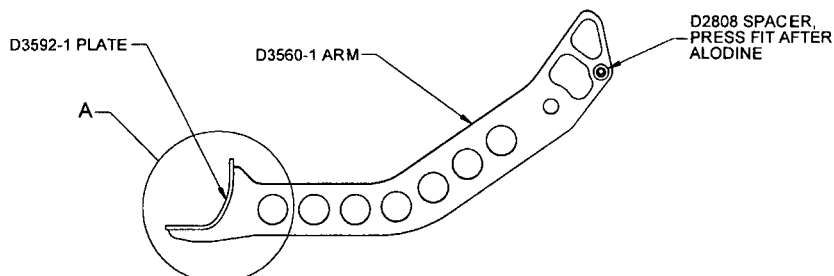
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

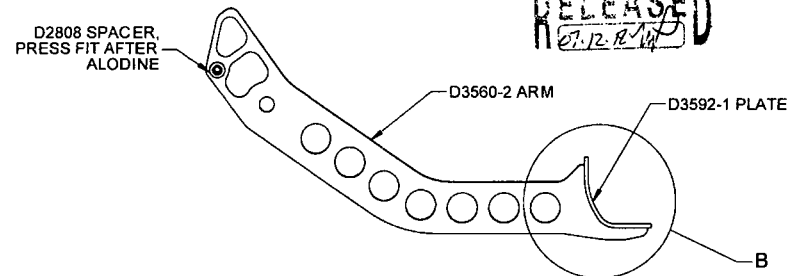
**NOTE:** Date & initial all entries



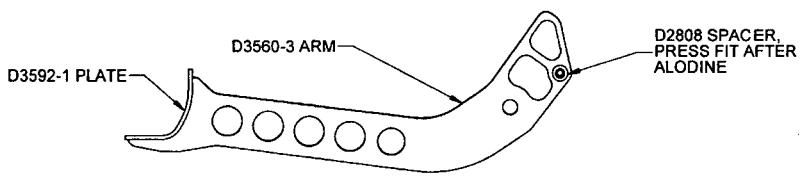
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07.12.16



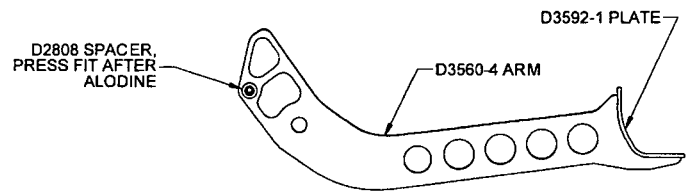
**D3560-041 ARM WELDMENT**



**D3560-042 ARM WELDMENT**



**D3560-043 ARM WELDMENT**



**D3560-044 ARM WELDMENT**

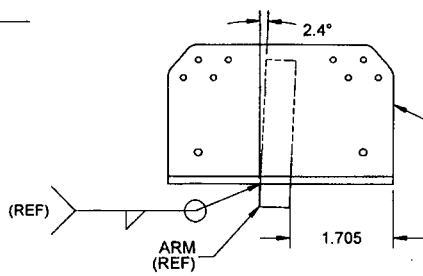
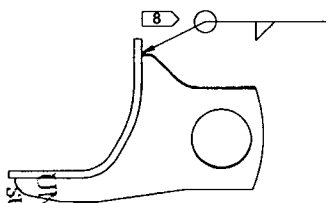
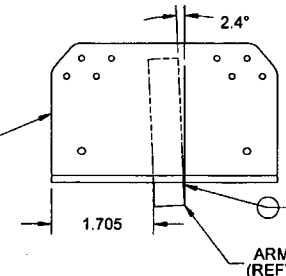
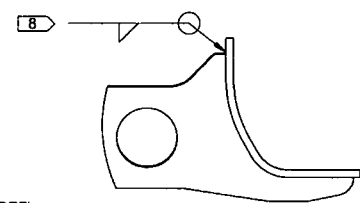


PLATE  
(REF)



ARM  
(REF)



**DETAIL B  
SCALE 1:2**

**PARTS LIST**

QTY -041	QTY -042	QTY -043	QTY -044	P/N	DESCRIPTION
X				D3560-041	ARM WELDMENT
	X			D3560-042	ARM WELDMENT
		X		D3560-043	ARM WELDMENT
			X	D3560-044	ARM WELDMENT
1	1	1	1	D2808	SPACER
1				D3560-1	ARM
	1			D3560-2	ARM
		1		D3560-3	ARM
			1	D3560-4	ARM
1	1	1	1	D3592-1	PLATE

D	ADD D2808 PRESS FIT NOTE; REDRAWN IN SOLIDWORKS	DC	07.11.16
C	REMOVE POWDER COAT	CP	07.06.19
B	REDESIGN AS WELDMENT, ADD POCKETS	CP	07.01.15
A	NEW ISSUE	CP	06.09.25
REV.	DESCRIPTION	BY	DATE
DESIGN	LC		
DRAWN	LC		
CHECKED	LC		
MFG. APPR.	LC		
APPROVED	LC		
DE APPR.	LC		
DATE	07.11.16		

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D3560**

TITLE **ARM WELDMENT**

REV. D SHEET 1 OF 5

SCALE 1:4

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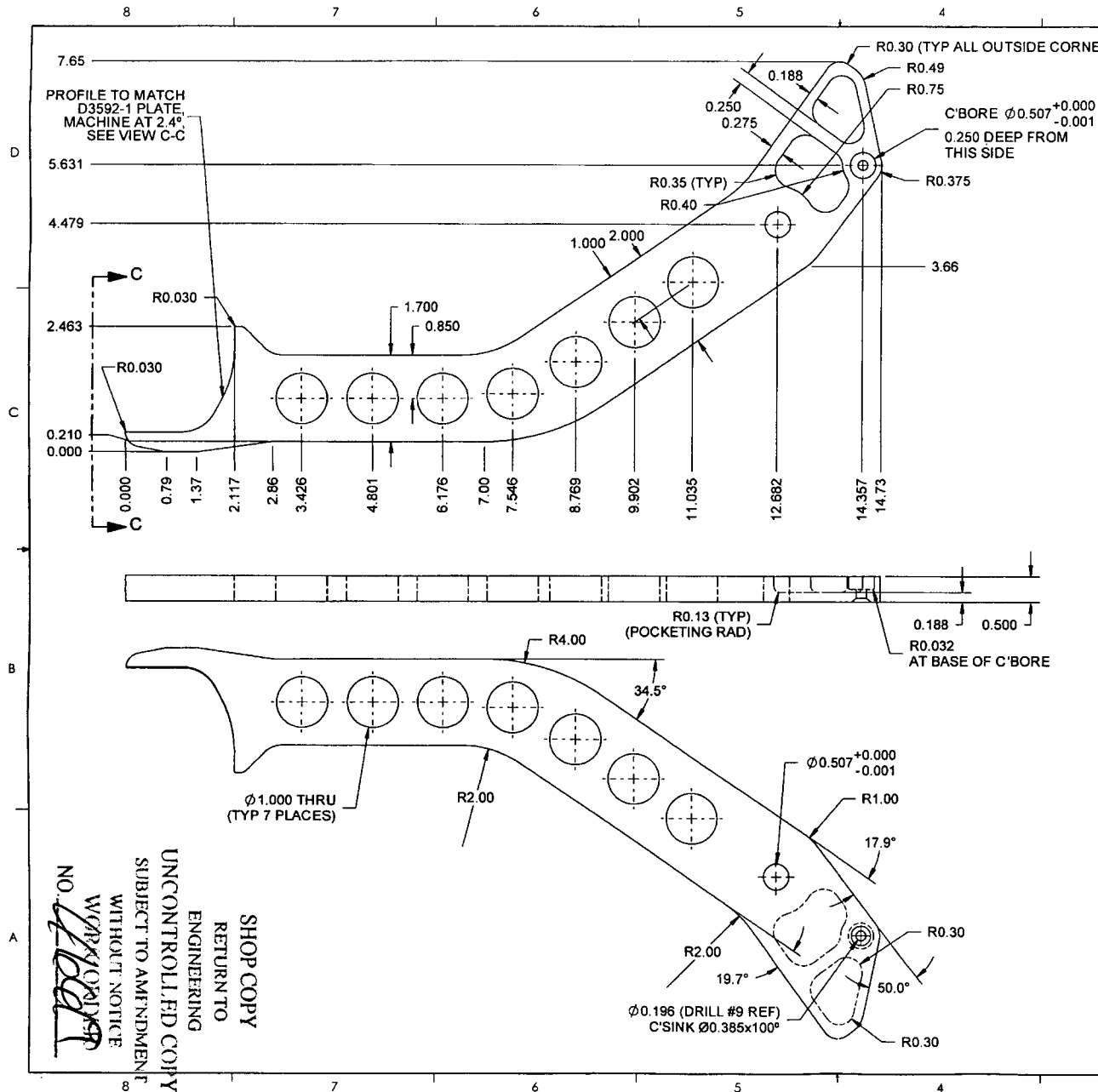
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DETAIL A  
SCALE 1:2

ENGINEERING  
TURN TO  
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COPY

- NOTES:**
- 1) MATERIAL: N/A
  - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 1.23 lbs (TYP)
  - 8) WELDING: PER DART QSI 004





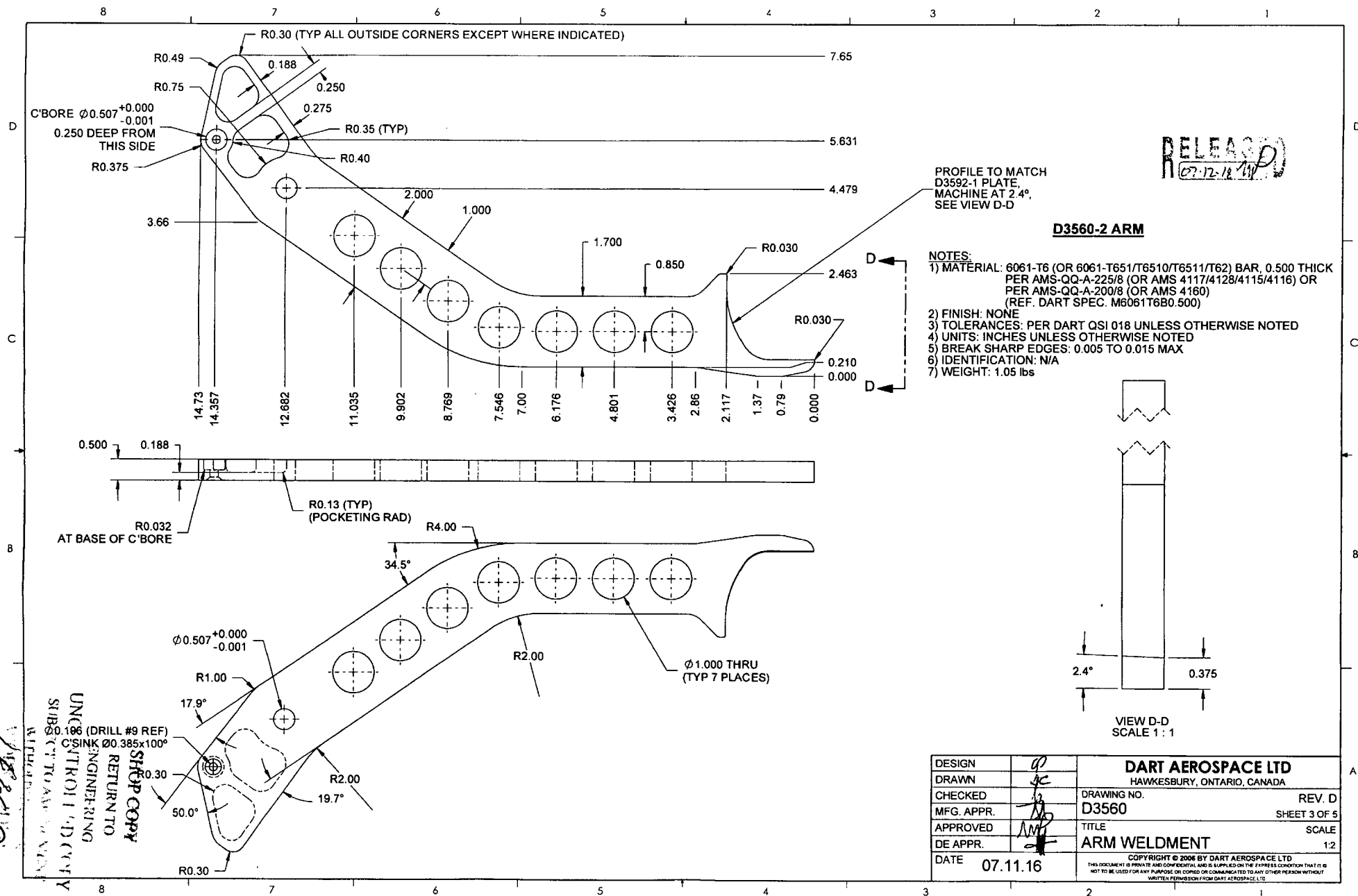
### D3560-1 ARM WELDMENT

#### NOTES:

- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6511/T6511/T62) BAR, 0.500 THICK PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR PER AMS-QQ-A-200/8 (OR AMS 4160) (REF. DART SPEC. M6061T6B0.500)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.05 lbs

DESIGN	90	<b>DART AEROSPACE LTD</b>	
DRAWN	90	HAWKESBURY, ONTARIO, CANADA	
CHECKED	90	DRAWING NO.	REV. D
MFG. APPR.	90	D3560	SHEET 2 OF 5
APPROVED	90	TITLE	SCALE
DE APPR.	90	ARM WELDMENT	1:2
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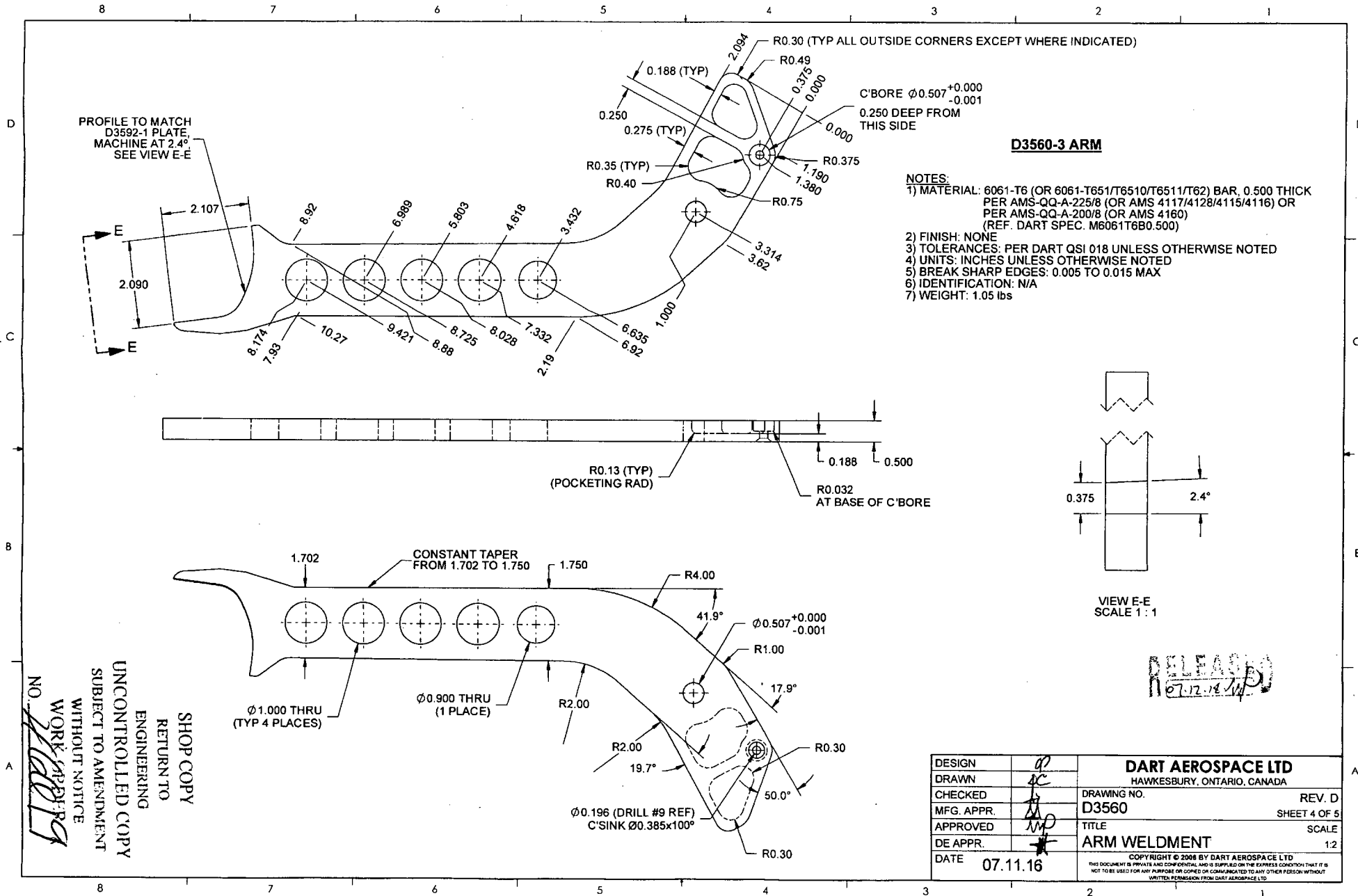


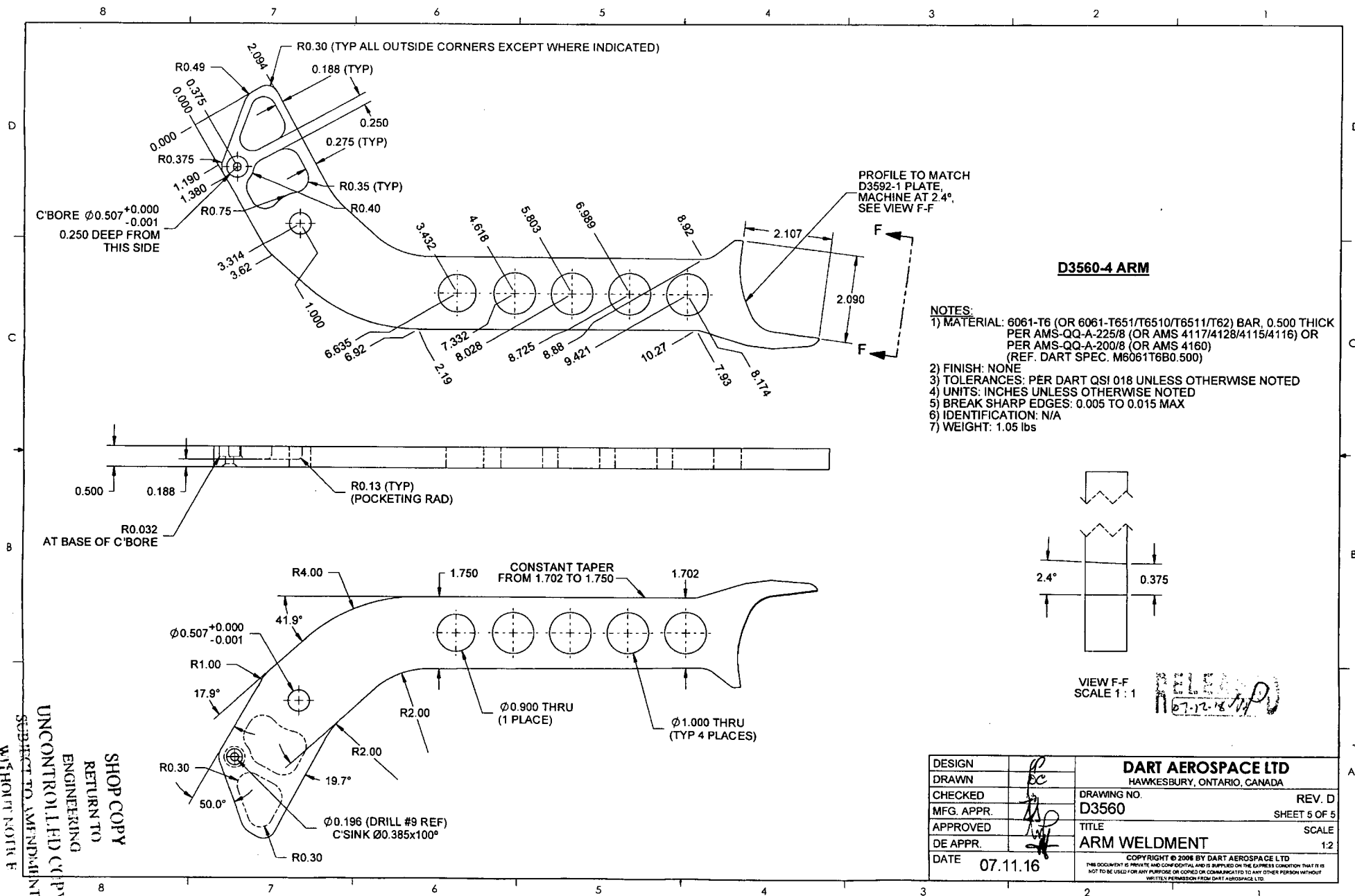
RELEASE  
07-12-18-110

**D3560-2 ARM**

## NOTES

- NOTES:**
- 1) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR, 0.500 THICK  
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116) OR  
PER AMS-QQ-A-200/8 (OR AMS 4160)  
(REF. DART SPEC. M6061T6B0.500)
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
  - 6) IDENTIFICATION: N/A
  - 7) WEIGHT: 1.05 lbs





8  
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